

# Satellite Communications

Serving The Humanitarian Sector

To Save and Improve Lives

# "In times of emergency, effective communication systems are critical to saving lives and preventing further destruction"





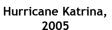






#### Disasters happen in an instance







Sichuan Earthquake, 2008



Queensland Floods, 2009



Japan Tsunami, 2011



Typhoon Haiyan Philippines, 2013

#### They all have one thing in common

Destruction/disruption of telecommunications services following these disasters severely hampered the efforts of relief workers, all of whom arrived on scene with different means of communication that were not interoperable between different agencies.

### Satellite communications serving humanity

#### Importance of Satcoms during disasters

- Natural disasters cost the global economy USD 300 billion annually resulting in heavy spending on emergency preparedness and response
- Terrestrial communication networks are rendered unusable during major events e.g.
   2M fixed / mobile lines down due to Hurricane Katrina alone
- Real-time warning systems and remote sensing techniques critical to ensure preparedness in disaster-prone areas e.g. Death toll of 230,000 in the Indian Ocean Tsunami largely attributed to the absence of a tsunami-detecting system
- Operational terrestrial networks become inadequate due to heavy traffic and congestion, which elevates the need for integrated satellite based solutions
- All deployed forces need communication with each other and with HQs

#### ETC identified high risk countries

23 Countries, all under Thuraya coverage

•	Ira	Q

- South Sudan
- Lebanon
- Turkey
- Jordan
- Egypt
- Syria
- Yemen

- DRC
- Nepal
- Libya
- Mali
- Ukraine
- Ethiopia
- Nigeria
- Burundi

- Afghanistan
- Pakistan
- Myanmar
- Bangladesh
- Philippines
- Tajikistan
- HoA



### Thuraya solutions and applications for disaster relief

Seamless communications for effective disaster management

Segment

#### Response

#### Relief

#### Rebuilding

Sustainability

First Responders, NGOs

**Govrnments and NGOs** 

Dev't Organization, Contractors, Private Organization

Requirement

Rapidly deployable Restore basic communications Locational awareness

Field office connectivity
Personnel security
Logistics support

Construction site management
Site security

Economic Dev't
Social Responsibility
Financial & Health
Services

Solutions/ Applications Disaster Early Warning Geo Information IP, XT, XTD, Netted Comms

Single/ multiuser Mobile office Indoor repeater IP. XT. XTD Remote Assistance Video Surveillance IP, XT, XTD, Indoor repeater Portable Data Collection, Telemedicine IP, XT, XTD, Indoor repeater, GSM roaming













United Nations





























### Thuraya's engagement with the NGO sector

#### Active partner on all fronts

- Member of the Humanitarian Charter
- Hosted WGET with Yahsat in 2015
- NetHope Partner
- ITU Partner





Track record of timely and effective response on the ground

- Nepal
- Malawi Floods
- Typhoon Haiyan





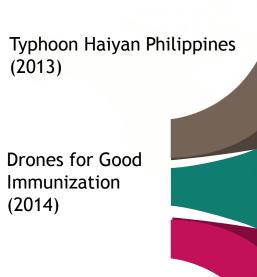




# Confidential and proprietary to Thuraya

### Going Beyond business

Continuing to support and honor our collective purpose...



500 Immigrants Saved (2014)













Nepal Earthquake Response (2015)

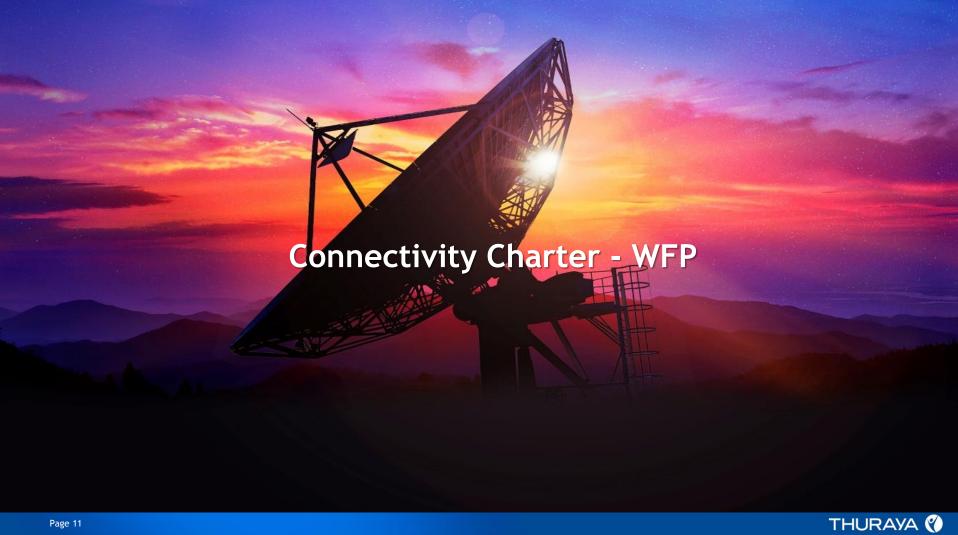
**School Donation** Zambia SOS Villages (2015)

> Sri Lanka Flood Response (2016)



#### Lessons learnt

- In times of crisis and emergency, access to telecommunication services is vital if a community is to get the support it needs
- Satellite technology is here to serve as the backbone to help provide aid relief against natural disasters, conflicts, and diseases
- There is a dire need for organized work between the regulators and national disaster management authorities in countries and regions prone to natural disasters, to help in the pre-deployment, training, testing, and cross-border movement of terminals
  - Authorities need to ensure satellite terminals are pre-deployed proactively instead of reactively
  - SAR teams need to be well- trained, and they need to test their pre-deployed equipment frequently, for operational readiness



#### Objectives of the Charter

Readily deployable solutions: prepacked, ready for deployment, scalable, reliable end to end solutions - connectivity, devices and services

Immediate implementation: Solutions to be deployed within 24 hours of the ETC trigger - with a mixture of MSS & FSS Communication for everybody: Provide communications for up to 1000 humanitarian workers + the effected population One point of contact per signatory & ETC: One person to facilitate coordination and deployment

Training & capacity building: Signatories responsible for training Full logistical support - ETC: Equipment is stored in Dubai at the International Humanitarian City Response Depot - ready for transport to disaster areas, transport within disaster areas, importation & licensing



#### **Implementation**

- 1. Environmental or man made disaster strikes
- 2. ETC triggers Conf-call within 12 hours and informs Charter Signatories of requirements
- 3. Charter signatories reach an agreement on best deployable solutions
- 4. Charter signatories liaise with ETC to ensure a quick and effective response is executed



This response should be able to cover all phases of disaster response and management:

- phase 1 (1-3 weeks)
- phase 2 ( 3 weeks 3 months)







# The Thirty to Thir

#### Challenges

- Internal processes of the WFP legal system very complex, contract signature still pending 12 months later
- Financial difficulties in implementing the charter - WFP can't support logistics (shipment, licences, maintenance etc) and training
- Donation requirement is huge and satellite operators cannot cover it totally - need government support



## **THANK YOU**

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